

What is claimed is:

1 1. A distributed component system in a network comprising:
2 a client node configured to process client activation
3 requests; and
4 a server node configured to monitor activation requests from
5 the client node, said node operating to enable the client node to
6 activate remote components on available server nodes without
7 specific names or capabilities of nodes in the network servicing
8 the requests.

1 2. The system of claim 1, wherein said network comprises a
2 local-area network, a wide-area network, or Internet.

1 3. The system of claim 1, wherein said activation requests
2 are processed by a client node that includes enhancements to a
3 network protocol of the client node.

1 4. The system of claim 1, wherein said server node include
2 enhancements to a network protocol of the server node.

1 5. The system of claim 1, wherein said distributed system
2 comprises a DCOM framework.

1 6. A distributed computing system in a network having a
2 client and a server, the system comprising:

3 a first module configured to augment activation capabilities
4 of the client by intercepting and processing machine-independent
5 client activation requests, and

6 a second module coupled to the server, said second module
7 configured to monitor requests on the server by the client, said
8 first and second modules enabling the client to trigger creation
9 of remote components without specific names or capabilities of
10 network nodes servicing that creation.

B 7. A method comprising:

1 2 receiving a machine-independent activation request from a
3 client in a network;

4 multicasting said activation request to the network; and

5 receiving capability information from servers available to
6 service said activation request.

1 8. The method of claim 7, wherein the capability
2 information includes a list of server IP addresses or UNC names
3 of servers that have the ability to service a request for a
4 specific CLSID.

1 9. The method of claim 7, wherein the capability
2 information includes an interface through a CLSID directly.

1 10. A method comprising:
2 monitoring at a server a specific port to receive a machine-
3 independent client activation request within a network;
4 retrieving a client address from an IP packet associated
5 with the request; and
6 returning capability information of the server to the client
address.

1 11. The method of claim 10, wherein monitoring the specific
2 port includes monitoring a port that is tied to a multicast IP
3 address.

1 12. The method of claim 10, wherein returning includes
2 returning a server IP address.

1 13. The method of claim 10, wherein returning includes
2 using a distributed system creation mechanism to create, package,
3 and return an interface pointer in a location transparent form.

1 14. A method comprising:
2 receiving a machine independent activation request from a
3 client in a network;
4 multicasting said activation request to the network;
5 B) requesting capability information from servers available to
6 service said activation request;
7 monitoring a port that is tied to a multicast IP address;
8 retrieving a client address from an IP packet; and
9 returning capability information of the server to the client
10 address.

15. The method of claim 14, further comprising:
1 providing a CLSID, an interface identifier, a maximum and
2 minimum response wait time, a maximum and minimum response count,
3 and whether server names or IP addresses should be returned,
4 before the client requests capability information from the
 servers.

1 16. The method of claim 15, wherein returning capability
2 information includes returning one to many server names or IP
3 addresses capable of servicing said activation request for the
4 particular CLSID and information identifier requested.

1 17. The method of claim 15, wherein returning capability
2 information includes returning a pointer to the interface
3 identifier.

1 18. The method of claim 17, wherein said pointer is
2 packaged into a location transparent form.

1 19. The method of claim 18, wherein the location
2 transparent form is a DCOM remote OBJREF in the form of a MEOW
3 packet.

1 20. A computer program, residing on a computer readable
2 medium, the program comprising executable instructions that
3 enable the computer to:

4 B receive a machine-independent activation request from a
5 client in a network;

6 multicast said activation request to the network; and

7 receive capability information from servers available to
8 service said activation request.

1 21. A computer program, residing on a computer readable
2 medium, the program comprising executable instructions that
3 enable the computer to:

4 monitor at a server a specific port that is tied to a
5 multicast IP address to receive a machine-independent client
6 activation request within a network;

7 retrieve a client address from an IP packet associated with
8 the request; and

9 return capability information of the server to the client
10 address.

11 22. A computer program, residing on a computer readable
12 medium, the program comprising executable instructions that
13 enable the computer to:

14 receive a machine-independent activation request from a
15 client in a network;

16 multicast said activation request to the network;

17 request capability information from servers available to
18 service said activation request;

19 monitor a port that is tied to a multicast IP address;

20 retrieve a client address from an IP packet; and

21 return capability information of the server to the client
22 address.

1 23. A distributed component network comprising:
2 client nodes configured to be able to request activation of
3 remote components at run-time without specific names or
4 capabilities of nodes servicing those requests; and
5 server nodes operating to monitor the requests and respond
6 appropriately to service the requests.

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end